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FEASIBILITY STUDY AND INVESTMENT ANALYSIS – TEXTILE MACHINERIES AT PT HEKSATEX Bandung, Indonesia, 2012

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Abstract-*The Spacer fabric production from PT Hexsatex number is very increasing by the year ,it can be seen from the history of the production increase due to increase in demand from 2006 to 2011. The need of spacer fabric varies from the base material product shoe products, furniture, mattresses, bags, garmentand accesories, and various other needs . Based on the customer needs, the company strives to provide availability of productson the market. In fact, the production capacity of PT Hexsatex machine is still limited and not comparable with increasing demand from the market. However, this research through the end of the project to carry out an analysis of the new machine investment Spacer fabric to enhance the production capacity of PT Hexsatex. In conducting investment analysis of new engines for PT Heksatex, researchers conducted a financial analysis to drive the machine, through the analysis of financial lease or operating lease, which is more profitable for the company. Once these aspects are fulfilled researchers to analyze cash flow predictions, Payback Period, Net Present Value, Interest Rate Return, and Profitability Index. Based on this analysis can be said to be feasible if the value of the project NPV is greater than zero and IRR greater than theWACC. As foraspects of production estimates PT Heksatex will choose the estimated sales optimist. Based on the financialanalysis of the PT Heksatex choose leasing options with optimistic estimates. The option shave a NPV>0,IRR>WACC, and a payback period of 5 years. From the analysis of the analysis showed that the advantage of this option, especially because the cost is lower.*

Key Words: Spacer fabric machine, New investment, Financial Aspect, NPV, IRR, and Optimistic estimate.

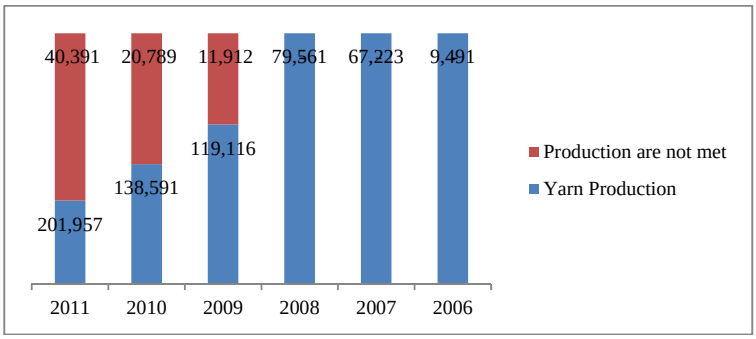
I. Introduction

PT Heksatex is a major spacer fabric supplier to the various manufacturers such as shoes, furniture, bags, garments, and other accessories. It has a historical increase of spacer fabric production from 2006 to 2011. This situation was in support to the global increasing demand. With decreasing textile productions from china, the demand from customer has to divert elsewhere. The labor cost is one of problems in china which impacts price products. Related to the company is: the demand from outside country was increase, because of textile product in 3rd party country included Indonesia. Based on Indonesia Finance, April 13th 2012, the report shows that China dominates the global textile trade42% of the global textile marketing 2011by having a production capacity of 62 million tons per year. World textile tradein the estimate was U.S.$ 600 billion in 2011. However, in the same year China's textile trade decreased by 1.8% of total Chinese exports of more than U.S.$ 200 billion. This positively impacts the Indonesian textiles with the growing of demands from the global customers.

However, the current Indonesian textile production capacityis limite donly up to 6.2 million tons per year and compared with China's production capacity is still 10 times that. In 2010 the Indonesian textile exports reached U.S.$ 11.21 billion, an increase of 21% compared to 2009. In 2011 the Indonesian textile industry export reached U.S. $ 13 billion and has the potential to grow even more if you look at the demand of the increasing market. Presently that Indonesia controls 1.67% share of the world market share of 4.55% in the United States and 1.28% market share in the EU. In China in 2011, the cost of production has increased significantly, especially wage employees.

In the last 3 years since 2010, many companies begin to look like the third country in Southeast Asia such as Indonesia, Vietnam, Cambodia to see the wages of the fairly low when compared to China.We can see there are at least three garment factories and four shoe factories already relocated their factories to Indonesia such as Nike, Adidas, and the sister brands of the two giant groups. In a few years we could see a lot of plants that will be moved or relocated to Indonesia. PT Heksatex would like to capitalise on this relocations of various factories -for example shoe factories, as most of them require spacer fabrics asone of the shoe materials. Impacted by the above phenomenon, experiencing an increase in the demand of spacer fabric from outside country. Mainly from Asia, Europe and USA. This increase in demand outside and inside the country a company such as PT Heksatex is realizing its limited capacity.

Along with the increasing of demand, PT Heksatex has been willing to invest in the latest technology or the latest machinery, increasing its production capacity closer to meeting the increasing market demand. As a result, PT Heksatexis currently the largest producer of Spacer Fabric in Southeast Asia. It is therefore, looking to invest in new machineries to further fulfil the recent trend in growing global demand of spacer fabrics. Based on thefinancial statements of PT Heksatexin the last 6 yearsperiod [2006 to 2011], the projected 5-year report of the consolidated balance sheet and income statement will be estimated in optimistic, normal and pessimistic natures, anticipating the afro-mentioned trend in the increasing global demand of its products.



Above data shows that in year 2009 to 2011 PT Heksatex has unmet production from demands, there are about 11.912 to 40.391 has loss demand because the capacity of production over capacity. To anticipate this issue, PT Heksatex consider to buy new machine but before that they also making some feasibility study to predict demand in the next five years and calculation profit & loss. The purpose of this study is to evaluate thefeasibility of the investment of "warp-knitting" machineriesproducing spacerfabrics in the financial aspects.Using tools such as a Cost of Capital, Discount Rate, PV, NPV, IRR, etc, to also determine the best external financing option, the technicalaspects and the aspectratio are also used byPT. Heksatexin its decision-making process and strategicsteps further, also to determine the best external financing option.

Table 1. The company annual production from 2006 to 2011

Year	Spacer Fabric Production [by weight category] in kg			
	85-150 gsm	150-250 gsm	250-450 gsm	> 450 gsm
2011	18.580	120.770	37.160	9.290
2010	12.750	82.877	25.501	6.375
2009	10.959	71.232	21.917	5.479
2008	7.320	47.577	14.639	3.660
2007	6.184	40.199	12.369	3.092
2006	873	5.676	1.746	437

II. Business Potential Analysis

2.3 PESTEL Analysis

2.3.1 Political

The Indonesian government, in efforts to improve the investment climate, has designated various regulations, laws and policies that facilitate the investors to invest. The Indonesian government tried to establish conducive political and legal system to ease the investors' intentions at all industrial sectors. Legal certainty for investors continued to be addressed by the Indonesian government. All forms of invesmtents in Indonesia are regulated by law. Government Regulation. Laws No. 25 Year 2007, article 3 paragraph 1 is the basis of investing in Indonesia. It is held under the following principles: legal certainty, transparency, accountability, equal treatment and it does not distinguish country of origin, togetherness, efficiency in justice, sustainable environmental, independence, and the balance of progress and finally, national economic unity. Based on Laws No. 25 Year 2007, article 6 paragraph 1, the government gives equal treatment to all investors from any country who perform investment activities in Indonesia with accordance to the provisions of legislation.

In Addition to the established laws, the Indonesian government has also issued some regulations and policies which are sector-specific. For Textile, Indonesia has Goverment Regulation No. 15 /M – IND/PER/2/2012 concerning the program and revitalization of growing industrial machinery equipment through the restructuring of industrial textile, clothing and foowear industry.

2.3.2 Economy

The Indonesian economy in 2011 continued to improve, supported by solid domestic demand and conducive external conditions. In this year, Indonesia's economic growth reached 6.5%, higher than the growth in the previous year (2012) which was recorded at 4.6% (Bank Indonesia Publish, 2011).Indonesia's economic growth in first quarter 2011 is estimated to still quite high. Bank Indonesia predicts economic growth of Indonesia in the first quarter of 2011 reachedapproximately 6.4% (Bank Indonesia, 2010).

Based on BPS's study that the Indonesia's economic growth as measured by increase in Gross Domestic Product (GDP) in the second quarter 2012 was 2.8 % compared to the first quarter of 2012 (q-to-q) and when compared with the same quarter in 2011 experienced growth of 6.4 % (y-on-y). Cumulatively, Indonesia's economic growth in the first half of 2012 compared with the first half of 2011 grew by 6.3 %. The amount of GDP at current prices in the second quarter of 2012 reached Rp2.050, 1 trillion, while the GDP at constant prices in the same quarter 2000 amounted to Rp650, 6 trillion.The three sectors that experienced the highest growth (q-to-q) is the Sector Trade, Hotels and Restaurants 5.2 %; Sector Electricity, Gas and Water Supply 4.6 % and 4.4 % in the Construction Sector. As for growth (y-on-y) transport and communications sector grew 10.1 %; Sector Trade, Hotels and Restaurants 8.9 % and 7.3 % in the Construction Sector.The structure of the second quarter 2012 GDP is dominated by the Manufacturing Sector, Agriculture, and Trade Sector, Hotel, and Restaurant respectively contributed 23.5 %, 14.8 % and 13.8 %.GDP growth in the second quarter 2012 compared with first quarter 2012 (q-to-q) by 2.8 % supported by Household Consumption Expenditure increased by 1.4 %, while government consumption expenditures increased 27.2 %; Formation Gross Fixed Capital 6.3 %, exports of goods and services 1.3 %, and imports of goods and services 9.2 %.Compared with the second quarter of 2011 (y-on-y), the growth of the economy grew 6.4 % on Household Consumption Expenditure increased 5.0 %; Government Consumption Expenditure rose by 7.0 %, Gross Fixed Capital Formation 12.3 %; Exports of goods and services by 1.9 %, and imports of goods and services 10.9 %.Economic growth in the first half of 2012 to the first half of 2011 (c-to-c) of 6.3 % on Household consumption grew 5.0 %, government consumption grew 6.5 %,

Gross Fixed Capital Formation grew 11.2 %, while the Export and Import of positive growth respectively 4.8 % and 9.5 %.The structure of the second quarter GDP expenditure in 2012 was dominated by the Household Expenditure Components by 53.5 %.In addition, supported by Component Gross Fixed Capital Formation and Government Consumption Expenditure Components that contributed respectively by 32.9 % and 9.0 %. While the role of exports and imports respectively by 24.3 % and 26.6 %.Spatial structure of the Indonesian economy in the second quarter of 2012 was dominated by the provinces in Java Island that contributes to the GDP of 57.5 %, followed by Sumatra Island at 23.6 %, Kalimantan9.5 %, Sulawesi Island 4,8 %, and the remaining 4.6 % in the other islands. Improving this rating reflects the improvement of perception and assessment of rating agencies on the situation of the Indonesian economy proved resilient. This condition is expected increase the confidence of foreign investors to Indonesia.

2.3.3 Socio cultural

Specifically Indonesia sociocultural is very complex, given Indonesia's population of approximately 220 million in diversed religions and ethnic cultures. Most of Indonesia's population are living in the rural areas so that heterogeneous of rural culture is highly varied in the Indonesian sociocultural pattern. Generaly an agrarian culture still dominates Indonesian society. farming is the main livelihood. Indonesian rural communities either make their living by farming, rain-fed agriculture, irrigated agricultural fields, and plantations. Given the social diversity of uch, to achieve harmony between the companies that stand in a certain area in Indonesia with the locals, of course, companies must understand the social culture of the area. CSR programs conducted by each company must be adapted to the life patterns of where they do business.

2.3.4 Technology

Technological changes affect many parts of societies. These effects occur primarily through new products, processes, and materials. There are new inventions that use the 10 latest technology that can provide economic value to the users. Everyone or company can freely choose which technology they will use. Given the rapid pace of technological change, it is vital for firms to thoroughly study the technological segment. The importance of these efforts is suggested by the finding that early adopters of new technology often achieve higher market shares and earn higher returns

2.3.5 Environmental

Recently, every country concerns themselves on environment problems. Global climate change is the most talked about issue due to the increased of gas emission released to the atmosphere. Many multi-national conferences are held to discuss this specific issue. Gas emissions cause adverse effects on the environment and human life so much so that it should be controlled in accordance to the principle of responsibility. Indonesia as a conference participant also concerns itself to such environment issue. In order to maintain a balanced environment, Indonesian Government engages all parties (government, society, industry, etc.) to be aware of such issue. As a part of the textile industry, PT Heksatex' involvement with such environmental issue is unavoidable.

2.4 Industry Analysis

Each company has always had competition in their respective industries. It also occurs in PT. Heksatex in the textile industry. According to Porter (1979) there are five forces that determine the intensity of competition in an industry. Porter said the five competitive forces that can develop competitive strategies to influence or alter the power to provide a favorable situation for the company.

2.4.1 Threat of New Entrance / Barrier of Entry

Spacer fabric demand growing market both domestically and abroad as the number of mills - factory of the world will begin to look Asian countries, especially Indonesia to relocate the factory. By looking at these new opportunities, new investors will be a new threat to the old investors. However, the cost of entrance to the industry is very high - higher initial capital, not just for the producing machines, but also supporting from the facility to begin producingSpacer fabrics. Technical know-hows has very much limited the number of players in the field of warp-knitting, especially spacer fabric. Thus, one can say threat of new entrance is relatively medium to low, with a barrier of entry medium to high**.**

2.4.2 Bargaining Power of Suppliers

Supplier is the most important part in the production process. In the textile industry suppliers bargaining power would be considered high if the company is dependent on a single supplier. Supplier may increase the price at any time without notice. If more suppliers are available, the company can choose one supplier that provides the best price for the company. There are, however, a few materials exclusively chosen for spacer fabric production that are specific in their quality and characteristics, to the point where only a few suppliers in the world are able to supply. Therefore, including these exception in the equation, the bargaining power of suppliers can considered medium-high.

2.4.3 Bargaining Power of Customers

Buyers can be said to have a relatively low bargaining power, PT Heksatex currently has over 70% market share of these products in Indonesia spacers. In addition, there are some products and speial items monopolized by PT Hexsatex. In this case it can be said that the bargaining power of customers is virtually medium or medium to low.

2.4.4 Threat of Substitute Products

Substitute products come from other products that have the same work function so that the product can be accepted by the market. In this industrial product that has a function that adds a thick base fabric is used [2-dimesional], laminated with foam varies in thickness and density. However, this material cannot replace character breathable spacer fabric. Bounce recovery characteristics cannot even resemble the spacer fabric. These differences make separate substitute products in its market segment. Thus, the threat of substitute products for spacer fabrics can be summed up as Low.

3.1 Business Analysis

As can be seen in table3.1, the level yarn consumptions from 2006 to 2011continues to increase. This is an evident of an increase in production, following the increase of customer demand, since PT Heksatex only makes spacer products by order on demand. In that six years period, the yarn consumption of PT Heksatex peaked in 2011, when it hits 201.957kg

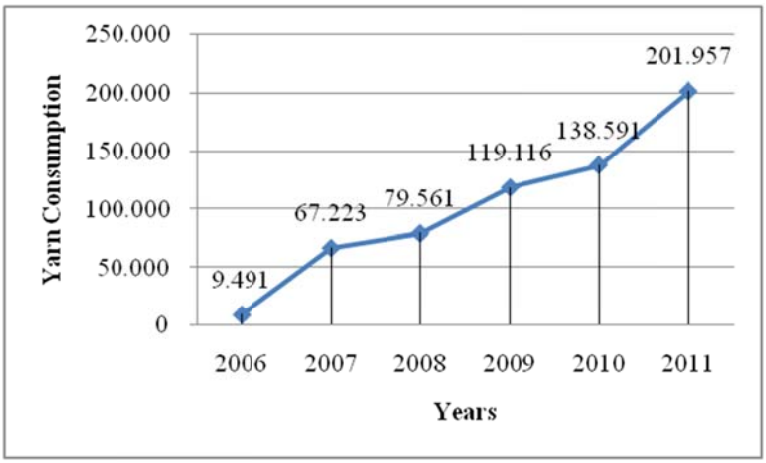


Table 3.1 Yarn consumption from 2006 to 2011 in gsm

Figure 3.1 shows theproportion of spacer fabric product distribution, by percentage ofeach fabric category produced. 65% of which is spacer fabric weighing 150-250gsmfollowedby 20% of 250-450gsm spacer fabrics.

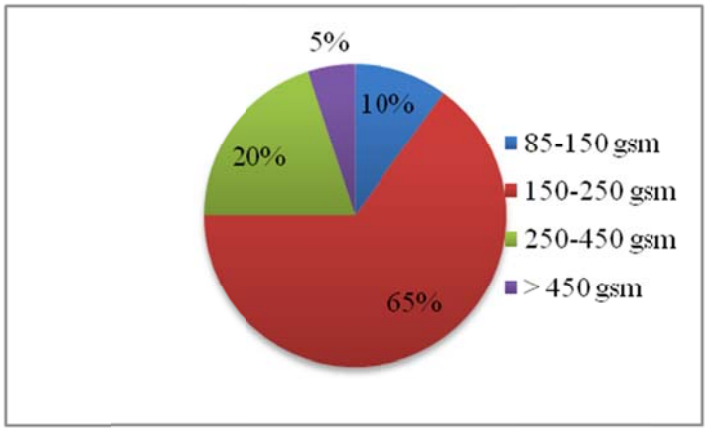


Figure 3.1 Proportion of various spacer fabric in percentage

3.2 Investment of New Machine

Spacer fabric machines currently owned by PT Heksatex have limitations in producing spacer fabric with increasing demand from consumers.

Therefore, toincrease theproduction capacityof PTHexsatexthe additionof newmachinesthathave the following criteria:

1. Able to increase capacity production
2. Able to producing spacer fabric as follows below :
   a. 85 – 150 gsm
   b. 150 – 250 gsm
   c. 250 – 450 gsm
   d. > 450 gsm
3. Able to increase the speed of production

Below table shown that production capacity for spacer fabric machine. This capacity have from the old machine which PT Hexsatex have it. The machine can produce four kinds of spacer fabric on above data. The machine have running metre per day about 1.442,8 m2 with weight 505 kg. Also, running metre per mont about 36.068,8 m2 having weight about 12.624,1 kg. For annual, running metre per year about 396.756,7 m2.

RPM	450		MC Gauge	12		
eRPM	225		Fabric Gauge	6		
min/hour	60		MC Width [Inch]	110		
hour/day	22,5		Fabric Width	220		
Ave Stitch/cm	10,0		Fabric Width/Pcs	44		
Assumed Efficiency	85,0%		Pcs/MC Width	5		
day/mth	25		Ave Fabric Weight	350	GSM	
mth/yr	11					
			x44 inch		Weight	
Running meter/Day	1.290,9		1.442,8	m2	505,0	kg
Running meter/Mth	32.273,4		36.068,8	m2	12.624,1	kg
Running meter/Yr	355.007,8		396.756,7	m2	138.864,9	kg

PT Hexsatex will be decide to buy a new machine with that cost Rp7.235.053.280 there are 2 option it can be made to lease or purchase the machine. The firm is the tax 25%.

Lease option

PT Hexsatex would obtain a 5 years lease requiring annual end of year lease payment of Rp2.025.944.579. with all maintenance cost would be paid by the lessor, and insurance and others costs would be borne by the lessee. The lesse would exercise it option to purchase the machine for Rp1.205.842.213 at termination of the lease.

Leasing			
End of year	After tax cash outflows	present factors	present value of outflows
1	1.085.257.992	0,885	960.453.323
2	1.085.257.992	0,7831	849.865.534
3	1.085.257.992	0,6931	752.192.314
4	1.085.257.992	0,6133	665.588.726
5	2.291.100.205	0,5428	1.243.609.191
		PV of cash outflows	**4.471.709.089**

Purchase option

PT Hexsatex would finance the purchase of the machine with 10%, 5 years loan requiring end of year installment payment of Rp 2.025.944.579 . The machine would depreciated MACRS using a 5 years recovery period. PT Hexsatex would pay Rp 289.402.131per year for a service contrac that covers all maintenance cost; insurance and other costs would be borne by the PT Hexsatex.

The after tax cash outflow from the lease payments can be found by multiplying the before tax payment of Rp 1.447.010.656. The lease alternative results in annual cash outflows over the 5 year lease of Rp 1.085.257.992. In the final year, the Rp 1.205.842.213 cost of the purchase option would be added to the Rp 1.085.257.992 lease outflow to get a total cash out flow in 5 year of Rp 2.291.100.205

The sum of the present values of the cash outflows for the leasing alternative is given Rp 4.471.709.089 is lower than that for purchasing Rp 6.045.961.837, So that the result is the leasing alternative is preferred. Leasing results in an incremental saving of Rp 1.574.252.749 and is therefore the less costly alternative.

Purchasing		
after-tax cash outflows	Present values factors	Present value of outflows
1.646.104.282	0,885	1.456.802.289
1.464.327.782	0,783	1.146.715.086
1.739.327.875	0,693	1.205.528.150
1.910.984.081	0,6133	1.172.006.537
1.961.882.415	0,5428	1.064.909.775
	PV of cash outflows	**6.045.961.837**

Below table shows that four test between Capital lease & Operating lease to have some new machine. Show that the operating lease more have benefit if we comparing with purchase machine. Purchase machine it can be costly because the owner should be pay the maintenance cost, interest, depreciation etc. Show that The lease contain a bargain purchase with operating lease option have Rp 1.205.842.213 cheaper than capital lease about Rp 1.447.010.656.

The lease term represents at least 75% of the estimated economic life of the leased machine, for capital lease have more > 5 years. Meanwhile, the operating lease have < 5 years. And present value if comparing between operating lease and capital lease. The operating lease more have valuable than capital lease.

Four test	**Capital lease**	**Operating lease**
1. Machine ownership is transferred to lesse at the end of lease term	PT Hexsatex own the machine at end of lease	PT Hexsatex return machine at the end of lease
2. The lease contain a bargain purchase	At end of 5 years, PT Hexsatex has the option to buy the machine for Rp 1.447.010.656	At end of 5 years PT Hexsatex purchases the Machine for Rp 1.205.842.213
3. The lease term represents at least 75% of the estimated economic life of the leased machine	> 5 Years term	< 5 Years term
4. The PV of the minimum payments at the beginning of the lease term is 90% + of the FMV of the leased machine to the lessor at the inception of the lease	1. 13 %, 2. 5 years 3. PV = Rp 6.045.961.837	1. 13 %, 2. 5 years 3. PV = Rp 4.471.709.089

Financial Assumption

On the financial aspect of thiswill be presented in a pessimistic calculation, median and optimistic. Assumptions used in thecalculation of the financial aspects of this investment are as follows:

1.Interest rateof 13%peryear
2.Revenuegrowth rateis pessimistic at 16.35%
3.By median revenue growth rate of 32.54%
4.Revenue growth rateof 45.72% optimistically
5.DiscountedFactor of 22%
From the calculation resultswill be discussedin more detail in Appendix3a, obtained the needed investment in buying warp knitting machine of Rp7,235,053,280.

Fixed Cost dan Variable Cost
Inthe calculation ofthis business we will determine what is considered a fixed cost and variable cost. For the cost of yarn, gray+warpping and WIP will be categorized as a fixed cost, variable cost while considered hereis the cost of sales and costs and general administration. For the total overhead is Rp1,231,354,513.

Sales Forecast
Revenue to be derived from sales of spacer fabric or a number of requests ordered by the consumer to be pessimistic calculations obtained total revenue in the first year of Rp16,602,532,757, median calculation of Rp18,912,760,564 and optimistic, gained total revenueof Rp20.7933.477.210(Appendix 3a) with a gross margin of 21% (Appendix 3a).
WACC Calculation

PT Hexsatex discount factor or WACC is calculated from cost of debt and cost of equity that multiply with each weight in capital structure. PT Heksatex's cost of equity is 13% and cost of debt is 12%.
According to the scenario PT Hexsatex's discount factor used in financial calculation is 10.5%
Financial Evaluation

Goal of PT Hexsatex in financial planning is to produce the greatest corporate value. In Spacer fabric machine the corporate value indicated with the largest NPV and IRR with the fastest payback period.
The Following are the general assumptions used in calculating project feasibility analysis

- Optimistic, Median and Pessimistic (Leasing & Purchase) scenarios use cost of debt 12%. This is number get from the interest loan that PT Hexsatex can be got.
- According to data table leasing scenario the maximum IRR (Optimistic) is shown 45%. Meanwhile, for the median is 28%.
- Accordig to data table leasing scenario the maximum NPV (Optimistic) is shown Rp Rp 24,134,619,508. Meanwhile, for the median just have Rp 9,583,121,460.
- Most likely scenario use interest loan 13%.
- In data table leasing scenario the maximum PBP (discounted) is show about 3 years in 5months. And median shown about 4 years in 6 months.
- In the data table below has same conclusion with optimistic scenario. The greates IRR and NPV are shown by below data. This scenario not only has the greatest IRR and NPV but also has the fastest payback period.

LEASING			WACC	IRR	NPV	PBP (Discounted)	
						Year	Month
Pessimist	Equity weight	34%	10.5%	1%	(Rp 3,342,104,021)	7	3
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					
Median	Equity weight	34%	10.5%	28%	Rp 9,583,121,460	4	6
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					
Optimist	Equity weight	34%	10.5%	45%	Rp 24,134,619,508	3	5
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					

LEASING			WACC	IRR	NPV	PBP (Discounted)	
						Year	Month
Pessimist	Equity weight	34%	22%	1%	(Rp 3,342,104,021)	7	3
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					
Median	Equity weight	34%	22%	28%	Rp 9,583,121,460	4	6
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					
Optimist	Equity weight	34%	22%	45%	Rp 24,134,619,508	3	5
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					

PURCHASING			WACC	IRR	NPV	PBP (Discounted)	
						Year	Month
Pessimist	Equity weight	34%	10.5%	(1%)	(Rp4,126,806,739)	7	9
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					
Median	Equity weight	34%	10.5%	26%	Rp 8,750,470,454	4	5
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					
Optimist	Equity weight	34%	10.5%	37%	Rp 23,301,968,502	3	4
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					

PURCHASING			WACC	IRR	NPV	PBP (Discounted)	
						Year	Month
Pessimist	Equity weight	34%	22%	(1%)	(Rp4,126,806,739)	7	9
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					
Median	Equity weight	34%	22%	26%	Rp 8,750,470,454	4	5
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					
Optimist	Equity weight	34%	22%	37%	Rp 23,301,968,502	3	4
	Debt weight	66%					
	Cost of equity	13%					
	Cost of debt	12%					
	Tax	25%					

- Optimistic, Median and Pessimistic (Purchase) scenarios use cost of debt 12%. This is number get from the interest loan that PT Hexsatex can be got.
- According to data table purchasing scenario the maximum IRR (Optimistic) is shown 37%. Meanwhile, for the median is 26%.
- Accordig to data table purchasing scenario the maximum NPV (Optimistic) is shown Rp 23,301,968,502. Meanwhile, for the median just have Rp 8,750,470,454.
- Most likely scenario use interest loan 13%.
- In data table purchaing scenario the maximum PBP (discounted) is show about 3 years in 4 months. And median shown about 4 years in 5 months.
- In the data table below has same conclusion with optimistic scenario. The greatest IRR and NPV are shown by below data. This scenario not only has the greatest IRR and NPV but also has the fastest payback period.

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